IN THE CLAIMS:

Please amend claims 1, 4, 6, 7, 9-12, 15, 17, 18, 33 and 42-44, cancel claims 2, 3, 13, 14, 34, 35, 40, 41 and 45, and add new claims 53-55.

This listing of claims will replace all prior versions, and listings of the claims in the application.

Listing of the claims

1. (Currently amended) A pyrogen-free composition comprising a plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements and a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-lα, MIP-lβ, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE and wherein said immunogen is a pathogen antigen.

2–3. (Canceled)

4. (Currently amended) The pyrogen-free composition ~~plasmid~~ of claim 1 wherein said immunogen is an HIV-1 antigen.

5. (Canceled)

6. (Currently amended) An injectable pharmaceutical composition comprising the pyrogen-free composition ~~plasmid~~ of claim 1.

7. (Currently amended) A method of inducing cytotoxic T cell response in an individual against an immunogen comprising administering to said individual a pyrogen free composition of claim 1 by intramuscular injection.

8. (Canceled)

9. (Currently amended) The pyrogen-free composition ~~plasmid~~ of claim 1 wherein said immunogen is herpes simplex antigen HSV2gD.

10. (Currently amended) An injectable pharmaceutical composition comprising the pyrogen-free composition ~~plasmid~~ of claim 9.

11. (Currently amended) A method of immunizing an individual against a herpes simplex virus infection comprising administering to said individual a pyrogen-free composition ~~plasmid~~ of claim 9 by intramuscular injection.

12. (Currently amended) A pyrogen-free composition comprising two plasmids: a first plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements; and a second plasmid comprising a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-

8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE wherein said immunogen is a pathogen antigen.

13–14. (Canceled)

15. (Currently amended) The pyrogen free composition of claim 12 wherein said immunogen is an HIV-1 antigen.

16. (Canceled)

17. (Currently amended) An injectable pharmaceutical composition comprising the pyrogen free composition of claim 12.

18. (Currently amended) A method of inducing cytotoxic T cell response in an individual against an immunogen, comprising administering to said individual a pyrogen free composition of claim 12 by intramuscular injection.

19-32. (Canceled)

33. (Currently amended) A method of inducing cytotoxic T cell response in an individual against an immunogen comprising administering to said individual by intramuscular

injection: a nucleic acid molecule comprising a nucleotide sequence that encodes said immunogen operable linked to regulatory elements; and a nucleic acid molecule comprising a nucleotide sequence that encodes said immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE wherein the immunogen is a pathogen antigen.

34. – 35. (Canceled)

36. (Original) The method of claim 33 wherein said immunogen is an HIV-1 antigen.

37 – 41. (Canceled)

42. (Currently amended) The pyrogen free composition of claim 12 wherein said immunogen is herpes simplex antigen HSV2gD.

43. (Currently amended) An injectable pharmaceutical composition comprising the pyrogen free composition of claim 42.

44. (Currently amended) A method of immunizing an individual against a herpes simplex virus infection comprising administering to said individual a pyrogen free composition of claim 42 by intramuscular injection.

45. (Canceled)

46. (Previously presented) A plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements and a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE, wherein said immunogen is an influenza antigen.

47. (Previously presented) A method of immunizing an individual against a influenza infection comprising administering to said individual a plasmid of claim 46 by intramuscular injection.

48. (Previously presented) A method of immunizing an individual against a pathogen infection comprising administering to said individual a plasmid of claim 3 by intramuscular injection.

49. (Previously presented) A pyrogen-free composition comprising two plasmids: a first plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements; and a second plasmid comprising a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE, and wherein said immunogen is an influenza antigen.

50. (Previously presented) A method of immunizing an individual against a influenza infection comprising administering to said individual a composition of claim 49 by intramuscular injection.

51. (Previously presented) A method of immunizing an individual against a pathogen infection comprising administering to said individual a composition of claim 14 by intramuscular injection.

52. (Previously presented) A method of claim 33 wherein said immunogen is an influenza antigen.

53. (New) The pyrogen free composition of claim 1 wherein said immunogen is a viral antigen.

54. (New) The pyrogen free composition of claim 12 wherein said immunogen is a viral antigen.

55. (New) The method of claim 33 wherein said immunogen is a viral antigen.